

System Contents		Address Map		Interconnect Requirements	
System: lms_ctr		Path: clk_main			
Use	Connections	Name	Description	Export	
<input checked="" type="checkbox"/>		<div>clk_main</div>	Clock Source		
		clk_in	Clock Input	clk	
		clk_in_reset	Reset Input	Double-click to export	
		clk	Clock Output	Double-click to export	
		clk_reset	Reset Output	Double-click to export	
<input checked="" type="checkbox"/>		<div>nios2_cpu</div>	Nios II Processor		
		clk	Clock Input	Double-click to export	
		reset	Reset Input	Double-click to export	
		data_master	Avalon Memory Mapped Master	Double-click to export	
		instruction_master	Avalon Memory Mapped Master	Double-click to export	
		irq	Interrupt Receiver	Double-click to export	
		debug_reset_request	Reset Output	Double-click to export	
		debug_mem_slave	Avalon Memory Mapped Slave	Double-click to export	
		custom_instruction_master	Custom Instruction Master	Double-click to export	
<input checked="" type="checkbox"/>		<div>switch</div>	PIO (Parallel I/O) Intel FPGA IP		
		clk	Clock Input	Double-click to export	
		reset	Reset Input	Double-click to export	
		s1	Avalon Memory Mapped Slave	Double-click to export	
		external_connection	Conduit	switch_external_connection	
<input checked="" type="checkbox"/>		<div>leds</div>	PIO (Parallel I/O) Intel FPGA IP		
		clk	Clock Input	Double-click to export	
		reset	Reset Input	Double-click to export	
		s1	Avalon Memory Mapped Slave	Double-click to export	
		external_connection	Conduit	leds_external_connection	
<input checked="" type="checkbox"/>		<div>sysid_qsys_0</div>	System ID Peripheral Intel FPGA IP		
		clk	Clock Input	Double-click to export	
		reset	Reset Input	Double-click to export	
		control_slave	Avalon Memory Mapped Slave	Double-click to export	
<input checked="" type="checkbox"/>		<div>uart</div>	UART (RS-232 Serial Port) Intel FPGA IP		
		clk	Clock Input	Double-click to export	
		reset	Reset Input	Double-click to export	
		s1	Avalon Memory Mapped Slave	Double-click to export	
		external_connection	Conduit	uart_external_connection	
		irq	Interrupt Sender	Double-click to export	
<input checked="" type="checkbox"/>		<div>fpga_spi</div>	SPI (3 Wire Serial) Intel FPGA IP		
		clk	Clock Input	Double-click to export	
		reset	Reset Input	Double-click to export	
		spi_control_port	Avalon Memory Mapped Slave	Double-click to export	
		irq	Interrupt Sender	Double-click to export	
		external	Conduit	fpga_spi_ext	
<input checked="" type="checkbox"/>		<div>lms_ctr_gpio</div>	PIO (Parallel I/O) Intel FPGA IP		
		clk	Clock Input	Double-click to export	
		reset	Reset Input	Double-click to export	
		s1	Avalon Memory Mapped Slave	Double-click to export	
		external_connection	Conduit	lms_ctr_gpio_external_connection	
<input checked="" type="checkbox"/>		<div>Av_FIFO_Int_0</div>	Av_FIFO_Int		
		clock	Clock Input	Double-click to export	
		avalon_slave_0	Avalon Memory Mapped Slave	Double-click to export	
		reset	Reset Input	Double-click to export	
		cnd_if_d	Conduit	exfifo_if_d	
		cnd_if_rd	Conduit	exfifo_if_rd	
		cnd_of_wrfull	Conduit	exfifo_of_wrfull	
		cnd_of_wr	Conduit	exfifo_of_wr	
		cnd_of_d	Conduit	exfifo_of_d	
		cnd_if_rdempty	Conduit	exfifo_if_rdempty	
		cnd_fifo_rst	Conduit	exfifo_rst	
<input checked="" type="checkbox"/>		<div>dac_spi</div>	SPI (3 Wire Serial) Intel FPGA IP		
		clk	Clock Input	Double-click to export	
		reset	Reset Input	Double-click to export	
		spi_control_port	Avalon Memory Mapped Slave	Double-click to export	
		irq	Interrupt Sender	Double-click to export	
		external	Conduit	dac_spi_ext	
<input checked="" type="checkbox"/>		<div>nios_custom_instr_bitswap_0</div>	Bitswap		
		s1	Custom Instruction Slave	Double-click to export	
<input checked="" type="checkbox"/>		<div>i2c_opencores_0</div>	I2C Master (opencores.org)		
		clock	Clock Input	Double-click to export	
		clock_reset	Reset Input	Double-click to export	
		export_scl	Conduit	i2c_scl	
		export_sda	Conduit	i2c_sda	
		avalon_slave_0	Avalon Memory Mapped Slave	Double-click to export	
		interrupt_sender	Interrupt Sender	Double-click to export	
<input checked="" type="checkbox"/>		<div>onchip_flash_0</div>	On-Chip Flash Intel FPGA IP		
		clk	Clock Input	Double-click to export	
		nreset	Reset Input	Double-click to export	
		data	Avalon Memory Mapped Slave	Double-click to export	
		csr	Avalon Memory Mapped Slave	Double-click to export	
<input checked="" type="checkbox"/>		<div>dual_boot_0</div>	Dual Configuration Intel FPGA IP		
		clk	Clock Input	Double-click to export	
		nreset	Reset Input	Double-click to export	

	Clock	Base	End	I...	Tags	Opcode Name
	<i>exported</i>					
	clk_main					
	clk_main [clk] [clk] [clk] [clk] [clk]	IRQ 0 0x0020_1800	IRQ 31 0x0020_1fff			
	clk_main [clk] [clk]	0x0020_20f0	0x0020_20ff			
	clk_main [clk] [clk]	0x0020_20e0	0x0020_20ef			
	clk_main [clk] [clk]	0x0020_2118	0x0020_211f			
	clk_main [clk] [clk] [clk]	0x0020_2080	0x0020_209f	1		
	clk_main [clk] [clk] [clk]	0x0020_2040	0x0020_205f	2		
	clk_main [clk] [clk]	0x0020_2060	0x0020_207f			
	clk_main [clock] [clock] [clock] [clock] [clock] [clock] [clock] [clock]	0x0020_2100	0x0020_210f			
	clk_main [clk] [clk] [clk]	0x0020_2020	0x0020_203f	3		
		Opcode 0	Opcode 0			nios_custom_instr_bitswap_0
	clk_main [clock] [clock] [clock]	0x0020_20a0	0x0020_20bf	0		
	clk_main [clk] [clk] [clk]	0x0010_0000 0x0020_2110	0x0018_bfff 0x0020_2117			
	clk_main [clk] [clk]					

rt rt rt	clk clk_main [clk1] [clk1]	0x0020 2000 0x0020 0000	0x0020_20df 0x0020_0fff		
rt rt rt	clk_main [clk] [clk] [clk]	0x0020 2000	0x0020_201f		